WHAT IS CLAIMED IS:

1. A composition for forming a rigid polyurethane foam, comprising an organic polyisocyanate, a polyol, a catalyst, a foam stabilizer, water as a foaming agent, and a low molecular weight compound (a) having an unsaturated bond and carbonyl group which are adjacent to each other in an amount of 0.01 to 20 parts by weight per 100 parts by weight of said polyol, as a modifying agent.

2. A composition for forming a rigid polyurethane foam, comprising an organic polyisocyanate, a polyol, a catalyst, a foam stabilizer, water as a foaming agent, a low molecular weight compound (a) having an unsaturated bond and carbonyl group which are adjacent to each other in an amount of 0.01 to 20 parts by weight per 100 parts by weight of said polyol, as a modifying agent, and other auxiliary agent(s).

3. A composition for forming a rigid polyurethane foam, comprising an organic polyisocyanate, a polyol, a catalyst, a foam stabilizer, water and a hydrochlorofluorocarbon as a foaming agent, and a low molecular weight compound (a) having an unsaturated bond and carbonyl group which are adjacent to each other in an amount of 0.01 to 20 parts by weight per 100 parts by weight of said polyol, as a modifying agent.

4. A composition for forming a rigid polyurethane foam, comprising an organic polyisocyanate, a polyol, a catalyst, a foam stabilizer, water and a hydrochlorofluorocarbon as a foaming agent, a low molecular weight compound (a) having an unsaturated bond and carbonyl group which are adjacent to each other in an amount of 0.01 to 20 parts by weight per 100 parts by weight of said polyol, as a modifying agent, and other auxiliary agent(s).

5. A composition for forming a rigid polyurethane foam according to claim 1, wherein the number average molecular weight of said low

molecular weight compound (a) is less than 500.

6. A composition for forming a rigid polyurethane foam according to claim 2, wherein the number average molecular weight of said low molecular weight compound (a) is less than 500.

7. A composition for forming a rigid polyurethane foam according to claim 3, wherein the number average molecular weight of said low molecular weight compound (a) is less than 500.

8. A composition for forming a rigid polyurethane foam according to claim 4, wherein the number average molecular weight of said low molecular weight compound (a) is less than 500.

9. A composition for forming a rigid polyurethane foam according to claim 1, wherein said low molecular weight compound (a) is a maleic acid ester.

10. A composition for forming a rigid polyurethane foam according to claim 2, wherein said low molecular weight compound (a) is a maleic acid ester.

11. A composition for forming a rigid polyurethane foam according to claim 3, wherein said low molecular weight compound (a) is a maleic acid ester.

12. A composition for forming a rigid polyurethane foam according to claim 4, wherein said low molecular weight compound (a) is a maleic acid ester.

13. A method of preparing a rigid polyurethane foam, characterized by using a composition for forming a rigid polyurethane foam according to claim 1.

14. A method of preparing a rigid polyurethane foam, characterized by using a composition for forming a rigid polyurethane foam according to claim 2.

15. A method of preparing a rigid polyurethane foam, characterized by using a composition for forming a rigid polyurethane foam

according to claim 3.

16. A method of preparing a rigid polyurethane foam, characterized by using a composition for forming a rigid polyurethane foam according to claim 4.